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VERIZON
PATENT MANAGEMENT GROUP
1515 N. COURTHOUSE ROAD
SUITE 500
ARLINGTON, VA 22201-2909

EXAMINER

DESIR, PIERRE LOUIS

ART UNIT	PAPER NUMBER
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2617

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/796,133	Applicant(s) PURANIK ET AL.	
	Examiner PIERRE-LOUIS DESIR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 6-9, 11-14, 16, 20-22, 26-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Jagadeesan et al. (Jagadeesan), Pub. No. US 20050059400.

Regarding claim 1, Jagadeesan discloses a device (i.e., dual-mode mobile station) (see fig. 2, paragraph 12) comprising: a wireless transceiver (i.e., wireless interface) (see fig. 2, paragraph 25); and logic to: determine whether a first terrestrial network is available for transmitting data, transmit the data to the first terrestrial network using the wireless transceiver when the first terrestrial network is available, determine, when the first terrestrial network is unavailable, whether a second terrestrial network is available, the second terrestrial network being slower than the first terrestrial network, and transmit the data to the second terrestrial network using the wireless transceiver when the second terrestrial network is available (i.e.,

Controller 42 manages the operation and control of mobile station 12. For example, controller 42 may be any suitable combination of microprocessors, programmed logic devices and other suitable controllers. During operation, Controller 42 may access information maintained within memory 44 to monitor qualities of links between mobile station 12 and other networks to determine appropriate times to handoff a call between such networks. Controller 42 may also perform such handoff at an appropriate time according to certain conditions, as further discussed below generally with respect to mobile station 12. In the illustrated embodiment, memory 44 maintains code 56 and configuration information 58. Code 56 includes software, logic modules, microcode and/or other suitable logic for use by elements of mobile station 12. For example, code 56 may include logic routines for implementing wireless communication protocols, for interacting with users, for establishing secure sessions. In particular embodiments, code 56 may include logic routines for monitoring quality of links 18a and 18b with cellular network 14 and WLAN 16, respectively, to determine when a handoff of a call from one network to another should be triggered. Code 56 may include an algorithm for making such determination and such handoff. Configuration information 86 includes settings and other configurations used during operation of mobile station 12. For example, configuration information 86 may include parameters used by an algorithm to determine an appropriate time to handoff a call from WLAN 16 to cellular network 14 or vice versa. Mobile station 12 monitors link quality indicators (LQIs) of both WLAN link 18a and cellular link 18b. Link quality indicators indicate the quality of such links, and the monitoring of the LQIs helps to determine when it is appropriate to handoff a mobile station from one network to another during a call, for example from WLAN 16 to cellular network 14 or vice versa. In operation, when a mobile station 12 is on a call through a connection with WLAN 16, mobile station 12 monitors the LQI of access point 24 with which mobile station 12 currently has an active connection as well as the LQI of other potential target access points 24. Mobile station 12 also monitors the quality of cellular link 18a (e.g., the link between mobile station 12 and BSSs 22). A handoff of the existing call may occur from WLAN 16 to cellular network 14 if the LQI of cellular link 18a is greater than a cellular link minimum threshold (i.e., determination of the availability of the WWAN) and if the link quality of WLAN link 18b is less than a handoff trigger threshold for a certain count of sample intervals, also referred to as a drop count (i.e., determination of unavailability of the WLAN or first network) (see paragraphs 29-35). Thus, if the link quality of the first network is above a certain threshold (i.e., first network availability) communication (i.e., receiving and transmitting) would continue using the first network. However, if the link quality of the first network is below a certain threshold (unavailability of the first network) and the link quality of the WWAN network is above a certain threshold, communication would be done using the WWAN network.

Regarding claim 3, Jagadeesan discloses a device (see claim 1 rejection) wherein the logic is further configured to: determine, when the first network is available, whether transmission of the data through the first network was successful, and perform the determining whether the second network is available when the transmission of the data through the first

network was unsuccessful (see paragraphs 29-35).

Regarding claim 6, Jagadeesan discloses a device (see claim 1 rejection) wherein the wireless transceiver comprises: a first wireless transceiver to transmit data to the first network (wireless interface 48) (see paragraph 27), and a second wireless transceiver to transmit data to the second network (wireless interface 76) (see paragraph 27).

Regarding claim 7, Jagadeesan discloses a device (see claim 6 rejection) wherein the first wireless transceiver transmits data at a different frequency than the second wireless transceiver (i.e., Jagadeesan discloses of a first wireless transceiver data to transmit data to the WLAN network that inherently transmits data at a WLAN frequency, and a second transceiver that transmits data to the WWAN network that inherently transmits data at a WWAN frequency) (see paragraph 27).

Regarding claim 8, Jagadeesan discloses a device (see claim 6 rejection) wherein the first wireless transceiver transmits data using a different communication protocol than the second wireless transceiver (e.g., since the first wireless transceiver is used to transmits data to a first network and the second wireless transceiver is a WWAN transceiver (see fig. 2), the first wireless transceiver is inherently transmits data using a different protocol than the second wireless transceiver) (see paragraph 27).

Regarding claim 9, Jagadeesan discloses a device (see claim 6 rejection) wherein the first wireless transceiver transmits data using a different modulation technique than the second wireless transceiver (e.g., Jagadeesan discloses a WLAN transceiver and a satellite network transceiver which would inherently use different modulation technique) (see paragraph 27).

Regarding claim 11, Jagadeesan discloses a device (see claim 1 rejection) wherein the

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logic is configured to determine whether the first network is available in response to the device being powered up (e.g., as known in the art when power is initially applied to a mobile device or when a mobile device powers on or enter a given coverage area, the mobile station will attempt to access to a network) (see paragraphs 29-35).

Regarding claim 12, Jagadeesan discloses a device (see claim 1 rejection) wherein the logic is configured to determine whether the first network is available in response to the device having data to transmit (e.g., as known in the art when power is initially applied to a mobile device or when a mobile device powers on or enter a given coverage area, the mobile station will attempt to access to a network) (see paragraphs 29-35).

Regarding claim 13, Jagadeesan discloses a method for transmitting data, comprising: selecting a wireless network from a group of wireless networks via which to transmit the data (see paragraphs 29-35); and transmitting the data via the selected wireless network and wherein the group of wireless networks including a faster terrestrial network and a slower terrestrial network (see paragraphs 29-35). And, as known in the art, WLAN network provides higher speed access than a cellular network or satellite network.

Regarding claim 14, Jagadeesan discloses a method (see claim 13 rejection) further comprising: determining, prior to the transmitting, whether the selected wireless network is available, and transmitting the data via another wireless network in the group of wireless networks when the selected wireless network is unavailable (see paragraphs 29-35).

Regarding claim 16, Jagadeesan discloses a method (see claim 13 rejection) further comprising: providing an indication of availability of each wireless network in the group of wireless networks (see paragraphs 26 and 33).

Regarding claim 20, Jagadeesan discloses a method (see claim 13 rejection) wherein the selecting is performed automatically (see paragraphs 29-35).

Regarding claim 21, Jagadeesan discloses a device comprising means for selecting a network from a group of networks via which to transmit data, the device being capable of communicating with the selected network at a first speed that is different than another network in the group of terrestrial network (see paragraphs 29-35). And, as known in the art, WLAN network provides higher speed access than a cellular network.

Regarding claim 22, Jagadeesan discloses a device comprising logic to select a network from a plurality of terrestrial networks (i.e., WLAN WWAN) (see paragraphs 29-35); a first network in the plurality of terrestrial networks including a faster terrestrial network and a second network in the plurality of terrestrial network including a slower terrestrial network (i.e., see paragraphs 29-35); and a transceiver to transmit data via the selected network (see paragraph 27). And, as known in the art, WLAN network provides higher speed access than a cellular network

Regarding claim 26, Jagadeesan discloses a device (see claim 22 rejection) wherein the transceiver comprises: a transceiver for each network in the plurality of networks (see paragraph 27).

Regarding claim 27, Jagadeesan discloses a device (see claim 22 rejection) wherein the logic is configured to select the network automatically (see paragraphs 29-35).

Regarding claim 28, Jagadeesan discloses a device (see claim 22 rejection) wherein the logic is configured to select the network in response to an input from a user (see paragraph 30. Also refer to paragraphs 29, 31-35).

Regarding claim 29, Jagadeesan discloses a device (see claim 22 rejection) wherein the

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logic performs the selecting when data is to be transmitted from the device (e.g., as known in the art when power is initially applied to a mobile device or when a mobile device powers on or enter a given coverage area (i.e., data to be transmitted), the mobile station will attempt to access to a network) (see paragraphs 29-35).

4. Claims 2, 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jagadeesan in view of Menard, Pub. No. US 2003/0119568.

Regarding claims 2, 19, and 23, Jagadeesan discloses a device and a method wherein the first network is a WLAN network (see claims 1, 13, and 22 rejections).

Although Jagadeesan discloses a device and a method as described above, Jagadeesan does not specifically disclose a device and a method wherein the second network comprises a ReFLEX-based network.

However, Menard discloses a device and method wherein a first network comprises an IEEE 802.11-based network (see page 4, paragraph 48) and a second network comprises a ReFLEX-based network (i.e., paging network) (see page 4, paragraph 54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a device or method that may access an IEEE 802.11 network and a paging network in order to provide to the device the ability to switch between networks whenever factors, such as available service, signal strength, or types of communications being supported occur (see page 4, paragraph 54).

5. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jagadeesan and Menard, further in view of Bridgelall, Pub. No. US. 2002/0085516.

The combination discloses a device as described above (see claim 23 rejection).

Although the combination discloses a device as described, the combination does not specifically disclose a device wherein the logic is configured to select the IEEE 802.11-based network to transmit data over the ReFLEX based network when both networks are available.

However, Bridgelall discloses a device wherein the logic is configured to select the IEEE 802.11-based network to transmit data over (e.g., user preference) the WWAN based network when both networks are available i.e., when more than one network is available, either push based location services or a pull based location service may be desired. For example, even though WWAN coverage with good signal strength may be available in a mall, WLAN network access with equally good or slightly worse signal quality may still be preferred because of the higher speed access and additional in-commerce space services within the mall) (see paragraph 27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings to arrive at the claimed invention. A motivation for doing so would have been to provide continuous transition as related to network access.

6. Claims 4-5, 10, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jagadeesan in view of Griffith et al. (Griffith), U.S. Patent No. 6898427.

Regarding claim 4, Jagadeesan discloses a device (see claim 3 rejection) wherein the logic is further configured to determine, when the second network is available, whether

transmission of the data through the second network was successful (see col. 16, lines 39-42, and lines 52-56).

Although Jagadeesan discloses a device as described, Jagadeesan does not specifically disclose a device wherein the logic is further configured to store the data when the transmission of the data through the second network was unsuccessful.

However, Griffith discloses a device (i.e., pager or PCD) (see abstract) wherein, in operation, when communication is disrupted, any outgoing data from the pager is held in the memory of the pager (see col. 6, lines 33-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Griffith with Jagadeesan teachings in order to obtain a device wherein outgoing data from the device and incoming device to the device are held in specific memory when service is interrupted or disrupted so that upon establishing connection incoming and outgoing data is released to be exchanged accordingly. A motivation for doing so would have been to ensure the safety of the data, as related to data being lost.

Regarding claim 5, Jagadeesan discloses a device as described above (see claim 1 rejection).

Although Jagadeesan discloses a device comprising of a memory, Jagadeesan does not specifically disclose a device wherein the logic is configured to store the data in the memory for later transmission when the second network is determined to be unavailable.

However, Griffith discloses a device comprising a memory wherein an inherent logic is configured to store data in the memory for later transmission when a network is determined to be unavailable (see col. 6, lines 33-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Griffith with Jagadeesan teachings in order to obtain a device wherein outgoing data from the device and incoming device to the device are held in specific memory when service is interrupted or disrupted so that upon establishing connection incoming and outgoing data is released to be exchanged accordingly. A motivation for doing so would have been to ensure the safety of the data, as related to data being lost.

Regarding claim 10, Jagadeesan discloses a device as described above (see claim 1 rejection).

Although Jagadeesan discloses a device as described, Jagadeesan does not specifically disclose a device wherein the logic is further configured to establish a connection with an enterprise device when the first network is determined to be available.

However, Griffith discloses a device (i.e., PCD) (see abstract) wherein the logic is further configured to establish a connection with an enterprise device (i.e., base station 12) when the first network is determined to be available (see col. 5, lines 52-57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a base station or server device with which a connection is established to the network because this would ensure the proper execution of data transmission.

Regarding claim 15, Jagadeesan discloses a method as described above (see claim 13 rejection).

Although Jagadeesan discloses a method as described, Jagadeesan does not specifically disclose a method further comprising storing the data when none of the wireless networks in the group of wireless networks is available.

However, Griffith discloses a device (i.e., pager or PCD) (see abstract) wherein, in operation, when communication is disrupted, any outgoing data from the pager is held in the memory of the pager (see col. 6, lines 33-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the teachings as described by Griffith with Jagadeesan teachings in order to obtain a device wherein outgoing data from the device and incoming device to the device are held in specific memory when service is interrupted or disrupted so that upon establishing connection incoming and outgoing data is released to be exchanged accordingly. A motivation for doing so would have been to ensure the safety of the data, as related to data being lost.

7. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jagadeesan in view of Gunnarsson et al. (Gunnarsson), Pub. No. US 2003/0118015.

Jagadeesan a method as described above (see claim 16 rejection).

Although Jagadeesan discloses a method as described above, combination does not specifically disclose a method wherein the indication comprises an audio indication and a visual indication.

However, Gunnarsson discloses a method wherein availability of network is indicated by either an audio indication (i.e. predefined beep) or a visual indication (i.e., displaying of a text message) (see page 3, paragraph 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a method wherein the user of a wireless device is notified of networks

availability through either a sound or a received text message so as to allow the user to select the appropriate network.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jagadeesan and Menard in further view of Griffith.

The combination discloses a device as described above (see claim 23 rejection).

Although combination discloses a device as described, combination does not specifically disclose a device further comprising logic to establish a connection with an enterprise device when the IEEE 802.11-based network is available.

However, Griffith discloses a device (i.e., PCD) (see abstract) wherein the logic is further configured to establish a connection with an enterprise device (i.e., base station 12) when the first network is determined to be available (see col. 5, lines 52-57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have a base station or server device with which a connection is established to the network because this would ensure the proper execution of data

9. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jagadeesan in view of Chandranmenon et al. (Chandranmenon), Pub. No. US 20040077341.

Jagadeesan discloses a device as described above (see claim 22 rejection).

Although Jagadeesan discloses a device as described, Jagadeesan does not specifically disclose a device further comprising logic configured to override the selection of the network.

However, Chandranmenon a device further comprising logic configured to override the selection of the network (see claim 12 of Chandranmenon).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time of the invention to combine the teachings as described to arrive at the claimed invention. A motivation for doing would have been to ensure the proper network selection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PIERRE-LOUIS DESIR whose telephone number is (571)272-7799. The examiner can normally be reached on Monday-Friday 9:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pierre-Louis Desir/
Examiner, Art Unit 2617

/Joseph H. Feild/
Supervisory Patent Examiner, Art Unit 2617